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# An examination of the present and future selves of adolescents: Investigating possible selves and self-esteem in relation to gender and attachment

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# **An examination of the present and future selves of adolescents: Investigating possible selves and self-esteem in relation to gender and attachment**

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## **Abstract**

Gender differences in self-esteem and possible selves have long been documented, in particular girls have been reported to have lower self-esteem and generate more interpersonally oriented possible selves than boys during adolescence. To explore these findings the current study wanted to look at gender differences and relationship factors i.e. attachment, in regards to possible selves. The study investigated the possible selves generated by 52 adolescents aged 13-16 years, as well as measuring their self-esteem and attachment patterns. As predicted the results supported previous findings on gender differences, with the addition of finding attachment differences. In particular insecure participants had lower self-esteem and rated hoped-for selves as less likely to occur. As expected these attachment differences were more prevalent in girls.

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### **Ethical Statement**

The study complied with the ethical guidelines outlined by both the British Psychological Society (BPS) as well as those stated by the University of Plymouth.

Firstly, a Criminal Records Bureau (CRB) check was carried out as the study was being conducted with adolescents at a local school. Consent was gained by parents for participants under the age of 16 via opt-out consent forms (Appendix A). Both parents and participants were made aware that they had the right to withdraw at any time during the course of the study. They were also made aware that any information given would be kept confidential and would only be used for the purpose of the study. Participants were verbally briefed and debriefed, as well as provided with written briefs and debriefs. They were also given the opportunity to discuss any concerns they had about the study both before and after they had taken part.

All the data was collected by myself through direct contact with Lipson Community College.

### **Acknowledgements**

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### **Introduction**

It is becoming more important for adolescents to be thinking about their futures and planning ahead in today's current climate due to fewer jobs, more competition, and soaring tuition fees in higher education. Yet worryingly, research suggests that adolescents are not prepared when they leave school. A longitudinal study by Amundson, Borgen, and Tench (in press) found adolescents are leaving secondary school unprepared for career realities, and as a result both their careers and personal lives are in a state of uncertainty and conflict. It is therefore crucial to understand more clearly how adolescents are thinking of themselves now and in the future and what could be influencing their choices in life.

Most people would agree that adolescence is generally a difficult time, with cognitive, emotional, social and physical changes occurring. It can also be a confusing time as adolescents start thinking about themselves differently, in search of who they are and who they would like to become (Erickson, 1968). Erickson (1968) suggests that adolescence is a '*psychosocial moratorium*', a time which allows adolescents to try on different roles without committing to a single role. These changes have been characterised by increased cognitive abilities allowing them to think in a more abstract and less egocentric way (Piaget, 1964). This results in the adolescent thinking more hypothetically enabling them to make plans for their future (Harter, 1999).

One way of studying adolescents' views on their future plans and goals is through exploring the self-concept. The self-concept is how we think about ourselves; it is the self-view of who we believe we are, our morals, and who we think about becoming. It also involves semantic, visual and affective representations of who we are now as well as our past and future selves (Oyserman & Fryberg, 2006).

An area of the self-concept that is relevant to exploring adolescents' future goals and plans is 'possible selves'. Possible selves are the selves we imagine becoming in the future (Markus & Nurius, 1986), for example, 'I wish to become a teacher when I'm older'. In adolescence these possible future selves become increasingly central to self-regulation and psychological well-being (Oyserman et al. 2006). The possible selves theory appears to be compatible with Erickson's (1968) model of development, the '*psychosocial moratorium*'. For instance, individuals create more possible selves during adolescence with a decrease of possible selves into adulthood (Markus et al, 1986), which according to Erickson (1968) is when the individual should have found their ideal self.

It is important to understand what influences the development of particular possible selves because this can give us insight into adolescents self-views and behaviours. For that reason, the purpose of the present study will be to examine possible selves, as well as self-esteem in relation to attachment and gender. Thus gaining more knowledge on the self-views of adolescents through a comprehensive account of possible selves and how they relate to adolescents present and future self-views.

### **What are 'possible selves'?**

*"Possible selves are the future-oriented component of a multifaceted self-concept"* (Oyserman, 2001, pg.3)

The possible selves theory was first developed in 1986 by Markus and Nurius who described possible future selves as "not just any set of individual imagined roles or states of being. Instead they represent specific, individually significant hopes, fears, and fantasies" (Markus et al. 1986, pg. 954). For example, a hoped-for self may be a successful self, or a loved self, whereas a self we are afraid of becoming may be a depressed self or an unloved self.

However, this was not the first time the idea of possible selves had been discussed as many researchers and philosophers in the past have considered the notion of future selves. For example, James (1910) spoke of the 'potential social me' and distinguished it from past and present selves. Rogers (1951) also made a distinction between the 'actual self' and the 'ideal self' which is the self the individual aspires to be in the future. Therefore, although possible selves is quite a recent concept, the thought of people thinking about their future selves is not.

### **Possible selves and the link to behaviour and motivation**

Since the 1980's there has been a vast amount of interest in possible selves and what purpose they must serve to our functioning. To explore this Markus and Nurius (1986) extended their original theory by describing possible selves as cognitive manifestations of goals, hopes, fears, and motives. These cognitive manifestations give meaning to our thoughts, providing an essential link between our self-concept and motivation. Possible selves could therefore be seen as incentives for future goal-orientated behaviour. For example, when a person looks at what is possible for

them in the future they may alter their behaviour to achieve it. On the other hand when afraid of becoming a feared self they may avoid certain behaviours. Thus without creating possible selves it could be said that we would not have any motivation for obtaining our goals. Therefore possible selves are important in adolescence when individuals are faced with making important decisions about their future.

However, there needs to be balance between hoped-for and feared possible selves as balance appears to play an important role in forming positive self-identifying goals (Oyserman et al. 2006). For example, a balanced self may be, 'I hope I pass my exams, but fear I will fail'. By being aware of what they want to achieve as well as the consequences of not achieving it, adolescents are able to plan ahead and carry out behaviours to avoid the negative self (Oyserman & Markus, 1990). Hence, the adolescent is aware of what they need to do to succeed so is likely to achieve their goals, which consequently will motivate their behaviour. However, lack of balance can lead an adolescent to carry out actions without considering the consequences. For example, an individual may want to succeed in school exams, however does not consider the consequences of not revising for the exams, which leaves the adolescent bewildered about why they failed. Thus, to have balance they have to understand how to achieve the goal as well as how to avoid the negative outcomes.

The development of possible selves therefore appears central to how adolescents think about their future and planning what to do next. Hence, without planning ahead and setting goals adolescents would not have anything to strive for. Consequently, possible selves could be seen as the development of the self through achieving and avoiding certain hopes and fears. Thus individuals are seen as active in their own future development with possible selves central to how they perceive themselves achieving their goals (Lerner, 1982).

### **Possible selves and self-esteem**

Self-esteem is crucial to the development of possible selves, as it acts as the evaluative aspect of the self in which the adolescents draw upon when considering what is possible for them in the future (Shaffer, 1999). As Kahneman and Tversky (1982) discussed, when an individual thinks about their future they run mental scenarios of possibilities. The mental images produced depend on what is readily available in the individual's view. For example, if an individual has high self-esteem they are more likely to produce successful scenarios, whereas if they have low self-esteem they may envision unsuccessful selves. Markus and Nurius (1986) agree with this view and suggest this is why self-esteem is an important factor in creating possible selves. Hence, self-esteem enables an individual to generate different types of possible selves such as hopes and fears, which then impacts on their motivation and behaviours. Thus offering an explanation as to why low self-esteem can have such an impact on people's success in life.

Further research on possible selves suggests that individuals generally experience high self-esteem when they hold the belief that they can achieve their hoped-for possible selves. Feelings of competence, self-reliance, and control are also generated when they have achieved a hoped-for self (Knox, Funk, Elliott, & Bush, 1998; Knox et al. 2000). These positive self-views are said to be related to successful academic selves as individuals are found to create more strategies and

motivation to attain their goals and as a result have a greater chance of succeeding in school ( Anderman, Anderman & Griesinger,1999).

In contrast, it is likely that an individual will experience low self-esteem when they feel that their hoped-for possible selves are unattainable and as a result negative selves are more likely to occur. James (1890) suggested that those with lower self-esteem may be more likely to give up on hoped-for possible selves as low self-esteem acts as a stimulant for eliminating the possible selves individuals deem unattainable. Thus, some adolescence may believe they will not achieve what they have hoped for in the future, and so give up more easily on future aspirations, which would have consequences for both their careers and personal lives.

Exploring the concept of possible selves and self-esteem could also present ways of understanding why some adolescence experience more serious difficulties such as depression, delinquency, and other behavioural or mental health problems during adolescence. By acknowledging the link between self-esteem and behaviour through possible selves new ways of preventing some of the symptoms could be implemented. For example, interventions such as self-esteem building, or cognitive behavioural therapies which look at strategies for changing the way people think about their possible selves and consequently how they think about themselves.

### **Gender differences**

Research has consistently found gender differences in possible selves. For example, a large scale study by Knox and colleagues (2000) found that girls rated hoped-for possible selves as less likely to occur than boys, whilst rating feared possible selves as more likely to occur than boys. Other research is also consistent with these findings (Oysterman et al. 2006). However, this is not surprising given that during adolescence girls experience significantly lower self-esteem than boys (Block & Robbins, 1993; Bolognini, Plancherel, Bettschart, & Halfon, 1996).

In addition to the above gender differences on possible selves Knox et al. (2000) also found that adolescents differ in the types of categories of possible selves they generate. From their results they concluded that in general boys tended to focus on self-oriented possible selves such as occupation, whereas girls' possible selves were more interpersonally orientated. These findings appear consistent with similar research which has found male self-views are often related to asserting one's self, whereas females' self-views are related to connecting with others (Jordan, Kaplan, Miller, Stiver, & Surrey, 1991; Josephs, Markus, & Tafarodi,1992; Knox et al. 2000). These findings are also supported by the 'self in relation theory' (Jordan et al. 1991), which suggests that females' self-concepts are defined through relationships with others whereas men's are more self-orientated. Therefore, relationships appear to be a critical factor in the development of adolescents self-views, and holds special significance for girls.

### **Attachment patterns in relation to possible selves in adolescents**

So far from this review two clear patterns seemed to have emerged. The first is that self-esteem appears to play a part in the how the possible selves are generated and perceived. The second is that interpersonal relationships may be important to the types of possible selves developed, especially for girls. This is interesting given research has found a connection between the types of relationships individuals form

and levels of self-esteem (Cooper & Shaver, 1996). For that reason, it seems reasonable to suggest that exploring relationships relative to possible selves is necessary.

It appears that Markus and Nurius (1986) have considered relational factors in possible selves. For example, they believe possible selves are dependent on salient past experiences. In particular, they emphasized the social context, suggesting that possible selves are highly influenced by factors such as significant others (Brim & Kagan, 1980). However, to date no research appears to have explored the relationship between attachment and possible selves. Yet, interestingly research that has been conducted on adolescence self-esteem and attachment patterns have found insecure attachments during childhood can lead to lower self-esteem and more negative self-views of one's self during adolescence (Greenberg, Siegel, & Leitch, 1983; Kenny, 1987; Scharfe, 2002). As self-esteem has been found to be crucial to the development of possible selves, it is important to investigate the relationship between attachment and the development of possible selves.

Bowlby (1982) was the first to recognise the importance of a mother and infant bond. He suggested that the early experiences between mother and infant are internalised into the infant's internal working model, which serves as a prototype for the infant's future experiences and how they will manage them. Ainsworth, Blehar, Waters, and Wall (1978) went on to develop a system for identifying differences in attachment patterns, and distinguished between securely and insecurely attached infants. It has since been developed further with the insecurely attached category being split into an additional 3 categories; fearful, preoccupied, and dismissing (Bartholomew, 1990). Figure 1 displays the four attachment types and the individuals' views on themselves and others.

		Thoughts of Self	
		Positive	Negative
Thoughts of Others	Positive	<i>Secure</i> Comfortable with intimacy and autonomy	<i>Preoccupied</i> Preoccupied with relationships
	Negative	<i>Dismissive</i> Dismissing of intimacy Strongly independent	<i>Fearful</i> Fearful of intimacy Socially avoidant

**Figure1:** Model of attachment patterns (adapted from Bartholomew & Horovitz, 1991)

Hazen and Shaver (1987) have gone on to find these same attachment patterns in adolescents based on a measure similar to that of Ainsworth's and colleagues (1978). Hazen et al. (1987) found that adolescents who have a secure attachment are more self-confident and socially skilled. Whilst insecurely attached individuals lack self-confidence and worry about rejection. Similar findings from several self-



report measures of attachment suggest that the quality of a parent-adolescent relationship is consistently associated with individuals' self-esteem, social competence, and emotional adjustment (Greenberg et al. 1983; Kenny, 1987; Scharfe, 2002). These findings demonstrate that attachment is still highly influential during adolescence.

Therefore from the research it's expected that internal working models are likely to influence the types of possible selves generated, especially as possible selves are said to generate from how individuals perceive their world and experiences (Markus et al. 1986). For example, insecure attachment patterns are said to create feelings of low self-esteem and negative self-views. Low self-esteem is said to impact on the types of possible selves available to an individual. Therefore, the feelings a person generates about themselves and their world around them is likely to impact on the types of possible selves generated.

### **The current research**

In summary, possible selves are a type of self-representation that is highly salient to behaviours, motives, and feelings about the self (Markus et al. 1986). The possible selves approach used in the present study will allow the adolescent to name as many hoped and feared selves relevant to them. This enables access to both positive and negative self-views which gives an accurate understanding of adolescents self-views. In addition, self-esteem will also be measured to give a quantitative measure of adolescence self-views. Together these provide a multidimensional approach to exploring adolescence self-views on their present and future selves.

The purpose of the present study is to consider these self-views in relation to attachment and gender. It will explore the impact different types of attachment have on the development of possible selves. Furthermore, gender will also be considered, as past research has found there to be differences between the types of possible selves generated by boys and girls, suggesting that girls' possible selves may be more interlinked with relationships than boys (Knox et al. 2000). From reviewing the literature on possible selves and attachment, there appears to be no suggestion of age differences in possible selves or attachment during the ages of 13-16 years old (Cooper & Shaver, 1998; Slee, 2010). For that reason age will not be considered in this study.

*Hypotheses-* The present study will be testing the following hypotheses;

1. Firstly, self-esteem differences are expected to be found between both gender and attachment.
2. Secondly, consistent with previous research, gender differences are expected to be found in the possible selves generated by boys and girls.
3. Thirdly, from the present review possible selves differences are expected to be found between secure and insecure adolescents.
4. Finally, due to the research suggesting that girls are more interpersonally related, it will be predicted that there are gender differences between the attachment groups on possible selves.

## **Method**

### **Participants**

Participants in the study were a total of 52 secondary school students from randomly selected education classes in a local school from the South West of England. The sample consisted of 22 females and 30 males. The average age of the participants was 14.7 years ranging from 13-16 years old. They were of mixed ethnic and social economic status, however were predominantly white English. Participants were also of mixed academic ability ranging from below average to above average.

Participants were recruited via contact with a head teacher at a local school who gave permission for the study to take place during a citizenship lesson. All participants under the age of sixteen were given consent by their parents via the opt-out method; this is where consent is assumed when consent forms are not returned by a given date (See Appendix A). Participants over the age of 16 gave full consent by signing a consent form on the front of the questionnaire pack (Appendix B).

### **Measures**

The questionnaire pack completed by participants included four measures (See Appendix B for a copy of the Questionnaire Pack), these are as follows:

#### *1. Demographic information*

The demographic information was gained using a questionnaire developed to obtain information on the participant's age, gender, and year group.

#### *2. Possible Selves*

Participants possible selves were obtained using the '*possible selves questionnaire*' devised by Cross and Markus (1991). It is an open ended questionnaire which requires participants to list all their hoped-for possible selves as well as all their feared possible selves they can think of. The participants are then required to rate the likelihood of each possible self on a 7-point Likert type scale with one indicating no likelihood of it occurring to seven indicating they believe it is very likely to occur. To measure the importance of each possible self-participants were also required to rate how much they hoped a possible self would come true and how much they feared a possible self would happen. This was measured on a 4-point Likert type-scale.

It was an open ended questionnaire which allowed the participants to generate as many possible selves as they could without being restricted to a closed questionnaire such as having a standardised list (Markus & Nurius, 1986). The questionnaires were counterbalanced with half the participants filling out hoped-for selves questionnaires first whilst the other half of participants filled out the feared possible selves first. This was to stop any biases or influencing of the types of possible selves generated in the results. The wording of the current questionnaire had also been altered slightly to be deemed more appropriate for adolescence.

The possible selves questionnaire was used in this research as it was felt to be a reliable source of measuring possible selves in adolescence. It has been found to correlate significantly with positive affect and global self-esteem (Markus & Nurius, 1986).

### *3. Attachment patterns*

The attachment patterns were obtained using the '*Relationship Questionnaire (RQ)*' by Bartholomew and Horowitz (1991). The wording of the original RQ has been slightly altered to be deemed more suitably for adolescence (Scharfe, 2002).

The RQ is a single item measure made up of four short paragraphs, each describing a prototypical attachment pattern as it applies in close relationships. There are four attachment patterns described these are; secure, dismissing, preoccupied, and fearful. Firstly participants are asked to select the description that best describes them. Then participants are asked to rate their level of connection to each prototype on a 7-point scale. For example, an individual might rate him or herself: Secure 6, Fearful 2, Preoccupied 1, Dismissing 4. These ratings are then computed by adding secure and dismissing ratings (both have positive view of the self) and subtracting fearful and preoccupied (both have negative view of the self). These scores provide a *profile* of an individual's attachment feelings and behaviour, this categorises the participant into one of the 4 attachment groups.

Ratings from the original RQ correlate moderately with attachment styles determined by in-depth interviews (Bartholomew & Horowitz, 1991) and so provide a rapid measurement of attachment patterns. Attachment patterns assessed by the original RQ correlate with measures of self-concept; interpersonal functioning; presentations of family relationships in interview; and family, peer, and self-ratings (Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994). RQ ratings are also consistent with Hazan and Shaver's (1987) traditional three-category model (Brennan, Shaver, & Tobey, 1991).

### *4. Self-Esteem*

The final measure was Coopersmith's '*Self-esteem Inventory*' (1987). This is a self-esteem scale designed for school aged children. It contains 50 items measuring self-esteem in four areas these are; the general self, social-peers, home-parents, and school-academic. Coopersmith believed self-esteem to be global in nature and therefore the questionnaire is considered a uni-dimensional scale. The scale consists of 18 positively phrased items and 32 negatively phrased items which comprises of self-descriptive statements such as 'I am a lot of fun to be with'. There is also an additional eight items which are scored separately from the rest of the scale. This is a 'Lie scale' with scores being indicative of defensiveness. For example, if an adolescent scored between five and eight they could be presenting a rosier picture than the reality actually being experienced. Participants complete the inventory by ticking a box that states 'like me' or 'unlike me' to simple statements such as 'I am pretty sure of myself'.

The Coopersmith self-esteem inventory was used in this study as it is a well-established and valued scale that has had considerable use from many researchers. For example, Taylor and Reitz (1968) reported a split half reliability of .90. Coopersmith (1967) also reported test-retest correlations of .88 (for a five week period) to .70 (over a three year period), and finally, Byrne (1983) reported correlations ranging from .58 to .60 with the Rosenberg's Self-esteem Scale.

## **Design and Procedures**

The study used a two-factor between subjects design. Participants were categorised into two attachment groups; either secure or insecure (which included dismissing, preoccupied and fearful), through the completion of the RQ (Bartholomew et al. 1991). Gender was also used as a quasi-independent variable to group participants.

Correct ethical procedures were followed to ensure participants and their parents were made aware of confidentiality, protection from harm and right to withdraw throughout the study. As well as this the researcher was open and honest to ensure no deception throughout the research procedure.

Firstly, contact was made with the head teacher of a local secondary school who gave permission for the study to be carried out with students at the school (Appendix C). The study was agreed to be carried out in a citizenship lesson. Parental consent forms were distributed to all the parents of participants under the age of sixteen via the opt-out method (Appendix A). It was felt the opt-out method would get a more accurate response rate rather than the opt-in method. All the parents who were distributed consent letters gave their consent for their child to take part in the study. However, in total five participants were absent on the day of the study. Once consent had been obtained from parents and the over sixteen's had given consent, the study went ahead.

The study was carried out in three separate lessons in a classroom setting. All the participants were briefed before the study (Appendix D). The brief outlined the purpose of the study, the importance of confidentiality, and the right to withdraw. The participants were then asked to complete the questionnaire pack provided, which contained a demographic information page, and three questionnaires (these were described fully in the measures section; see Appendix B for a copy of the questionnaire). The participants were made aware that if they had any concerns or questions regarding the questionnaires they could raise their hand at any time during the study and the researcher would attend to them. It took approximately 30 minutes for the participants to complete the questionnaires. Once completed, participants were debriefed on the study, both verbally by the researcher as well as provided with a written copy of the debrief containing the contact details of the researcher to take away with them, (Appendix E).

## **Results**

### **Questionnaire Results**

#### *Attachment pattern*

From the Relationships Questionnaire (RQ) (Bartholomew et al. 1991) participants were categorised as either securely attached or insecurely attached (The insecurely attached group included fearful, dismissing, and preoccupied). From the RQ, 27 participants were defined as securely attached, which included 15 boys and 12 girls, whilst 25 participants were defined as insecurely attached, with 15 boys, and 10 girls. Therefore, the groups were quite evenly matched.

### Self-esteem

The mean total score on the Coopersmith's Self-esteem Inventory (1986) for adolescents global self-esteem was 59.58 ( $SD= 19.60$ ). Boys overall total mean score was 61.2 ( $SD= 19.51$ ). However, boys with a secure attachment had a total score of 73.87 ( $SD= 15.39$ ), whilst boys with an insecure attachment had a total score of 48.53 ( $SD= 14.41$ ). The girl's overall total mean score was 57.36 ( $SD=19.97$ ). Girls with a secure attachment had a total score of 71.67 ( $SD= 11.31$ ), and girls with an insecure attachment had a total score of 40.20 ( $SD= 13.18$ ). Overall, adolescents with a secure attachment scored a total mean score of 72.89 ( $SD=13.52$ ), whilst adolescents with an insecure attachment score a total mean score of 45.20 ( $SD= 14.27$ ). The mean scores are displayed clearly in Figure 2.



**Figure 2:** Estimated Marginal Means of Self-esteem Inventory score

Following this, a two-way between-groups analysis of variance (ANOVA) was conducted to explore the effect of gender and attachment patterns on levels of global self-esteem, as measured by the Coopersmith Self-esteem Inventory (1986). The interaction effect between gender and attachment was not statistically significant  $F(1, 48) = .62, p = .44$ . There were also no statistical significances found between boys and girls global self-esteem scores  $F(1, 48) = 1.83, p = .18$ . However, the analysis did suggest a significant statistical difference between the self-esteem scores of participants categorised as securely attached and insecurely attached  $F(1, 48) = 53.19, p < .01$ , with a substantial effect, partial eta squared = .53. Therefore, participants who were categorised as securely attached scored significantly higher on self-esteem scores than individuals categorised as insecurely attached.

As statistical differences were found between the two attachment groups further analysis was needed to examine the different areas of self-esteem. Therefore, a multivariate analysis of variance (MANOVA) was carried out to examine the main effects of attachment on the following areas of self-esteem; general, social-peer, home-parents, and school-academic. Using Pillai's trace, there was a significant effect of attachment on the different areas of self-esteem,  $V = .59$ ,  $F(5, 44) = 12.73$ ,  $p = .00$ . The results from the follow up univariate ANOVAs on the outcome of attachment on self-esteem variables are displayed in Table 1. (Appendix H)

**Table 1:** *F* values, Sig, and Effect size for differences between the separate variables of self-esteem scores for attachment.  $p < .05^*$

<b>Self-esteem</b>	<b>Secure</b>		<b>Insecure</b>		<b>F</b>	<b>Sig.</b>	<b>Effect Size</b>
	<b>M</b>	<b>SD</b>	<b>M</b>	<b>SD</b>			
<b>General</b>	20.37	3.76	13.16	4.59	38.10	.00*	.44
<b>Social-Peer</b>	4.81	1.30	4.00	1.62	5.95	.02*	.11
<b>Home-Parents</b>	5.80	1.89	3.00	1.78	8.65	.00*	.37
<b>School-Academic</b>	5.37	1.78	2.80	1.63	27.49	.00*	.36

Table 1 illustrates that insecure participants scored significantly lower in all areas of self-esteem compared to secure participants. Follow up univariate ANOVA's also revealed an interaction between gender and attachment on social self-esteem  $F(1, 48)$ ,  $= 5.12$ ,  $p < .03$ , however the effect size was small (partial eta squared = .10). This revealed that insecure girls scored significantly lower on social-peer self-esteem compared to secure girls.

#### *Possible Selves*

The overall mean number of hoped-for possible selves reported by participants in the study was 3.71 (SD=2.61) with a range of 0-11. The overall mean number of feared possible selves reported by the participants was 2.42 (SD=1.80) with a range of 0-9. Participants used the full range of likelihood ratings ranging from 1-7, and the distribution of hoped-for selves likelihood was normal with a mean of 4.56 for the total sample. Feared possible selves likelihood ratings were also normally distributed with a mean of 2.99 for the whole sample ranging from 1-7. Means and standard deviations for each of the variables, reported separately by attachment pattern and gender are listed in Table 2.

**Table 2:** Means, and Standard Deviations (SD), for possible selves variables

<b>Variables</b>	<b>Secure</b>				<b>Insecure</b>			
	<b>Male</b>		<b>Female</b>		<b>Male</b>		<b>Female</b>	
	<b>M</b>	<b>SD</b>	<b>M</b>	<b>SD</b>	<b>M</b>	<b>SD</b>	<b>M</b>	<b>SD</b>
<b>Number of hoped-for selves</b>	3.67	2.16	5.33	3.14	2.47	2.09	3.70	2.54
<b>Number of Feared selves</b>	2.73	2.46	2.42	1.73	2.0	1.41	2.60	1.26
<b>Likelihood of Hoped-for selves</b>	5.02	1.78	5.12	.90	3.83	2.25	4.02	1.49
<b>Likelihood of Feared selves</b>	2.68	1.97	3.27	1.99	2.77	1.69	3.05	1.69
<b>Ratings of Hoped-for selves</b>	3.46	1.04	3.45	.63	3.11	1.47	3.14	1.22
<b>Ratings of Feared selves</b>	2.34	1.40	2.43	1.37	2.68	1.53	3.23	1.23

A MANOVA was conducted to test for main effects of attachment patterns and gender among the following variables: mean number of hoped- for possible selves, mean number of feared-for possible selves, mean likelihood ratings of hoped-for and feared-for possible selves, and mean ratings for hoped-for and feared-for possible selves. Preliminary assumption testing found the Levene's homogeneity test of variance indicated that the assumption of variance had been violated with the total feared possible selves variable. Therefore, a square root transformation was carried out which successfully fixed the error.

Using the significance criterion of  $p < .05$ , Pillai's trace failed to find an interaction between gender and attachment and the possible selves variables  $V = .05$ ,  $F(6, 43) = .34$ ,  $p = .91$ . Pillai's trace also failed to find a statistically significant difference between the boys and girls on the possible selves variables  $V = .15$ ,  $F(6, 43) = 1.23$ ,  $p = .28$ . However, the univariate  $F$  tests revealed a significant difference between the total hoped-for possible selves of boys and girls  $F(1, 48) = 4.34$ ,  $p = .04$ , with girls generating more hoped-for selves than boys (girls  $M = 5.33$ , boys  $M = 3.67$ ). Gender differences on the remaining variables failed to reach statistical significance.

Pillai's trace did reveal however that there was a significant effect of attachment on the possible selves variables  $V = .33$ ,  $F(6, 43) = 3.50$ ,  $p < .01$ . The results from further univariate  $F$  tests are displayed in Table 3.

**Table 3:** Means, Standard deviations (SD), *F* values, Significance value and Effect size for attachment pattern differences in Possible Selves variables

<i>Variables</i>	<b>Secure</b>		<b>Insecure</b>		<i>F</i>	<b>Sig. value</b>	<b>Partial eta Squared</b>
	<b>M</b>	<b>SD</b>	<b>M</b>	<b>SD</b>			
<b>Number of hoped-for selves</b>	4.33	2.70	2.96	2.32	3.83	.06	.07
<b>Number of Feared selves</b>	1.39	.79	1.36	.63	.00	.96	.00
<b>Likelihood of Hoped-for selves</b>	<b>5.10</b>	<b>1.42</b>	<b>3.91</b>	<b>1.95</b>	<b>5.83</b>	<b>.02*</b>	<b>.11</b>
<b>Likelihood of Feared selves</b>	2.90	1.96	3.05	1.70	.12	.73	.00
<b>Ratings of Hoped-for selves</b>	3.48	.89	3.12	1.35	1.20	.29	.02
<b>Ratings of Feared selves</b>	2.39	1.37	2.90	1.41	2.01	.16	.04

Table 3 illustrates that insecure participants rated hoped-for possible selves significantly less likely to occur than secure participants. Scores on total hoped-for possible selves were also suggestive of differences with insecure participants generating less hope-for selves than secure participants.

To explore whether there were any effects between the secure and insecure boys, as well as the secure and insecure girls, separate MANOVA's were carried out for boys and girls. The Pillai's trace did not reveal any significance for boys  $V=.24$ ,  $F(6, 23) = 1.19$ ,  $p=.35$ . Again the Pillai's trace revealed no significant effect for girls  $V=.49$ ,  $F(6, 15) = 2.36$ ,  $p=.08$ . However, univariate *F* tests did reveal a significant difference between girls on ratings of likelihood of possible selves  $F(1, 20) = 4.59$ ,  $p<.05$ . Therefore, although a significant difference was found between attachment groups on likelihood of hoped-for possible selves, when attachment is separated by genders the difference appears to be weighed more in girls than boys.

### **Types of possible selves reported by adolescents**

To identify what types of possible selves were generated by adolescents, an inductive content analysis (Thomas, 2006) was used to code each item that participants generated into mutually exclusive categories for both hoped-for and feared possible selves. The inductive content analysis revealed eight categories for both hoped-for and feared possible selves these were: *general success/failure*, *occupation*, *relationship/interpersonal*, *material/financial*, *education/academic*, *general health*, *psychological health*, *general appearance* (see Appendix F for descriptions of each category). The possible selves data was assessed by two independent raters with agreement on the categories.

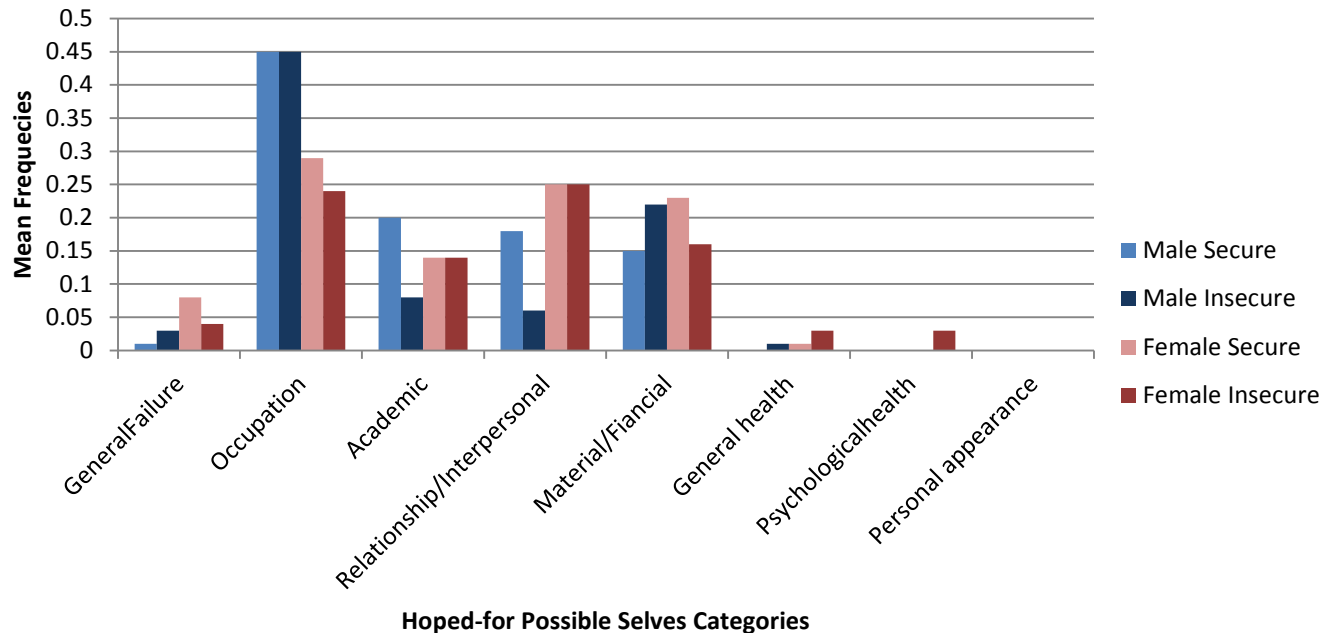
### **Individual differences in types of possible selves reported by adolescents**

To examine whether there were any gender or attachment differences between the types of possible selves generated by adolescents, the relative frequencies of each hoped-for and feared-for possible selves category was calculated. For hoped-for selves the number of possible selves in a given category was divided by the total



number of hoped-for selves generated by the participant. The same process was then carried out with the feared-for selves.

The mean frequencies for the mentioned categories for hoped-for possible selves are displayed in Figure 3.

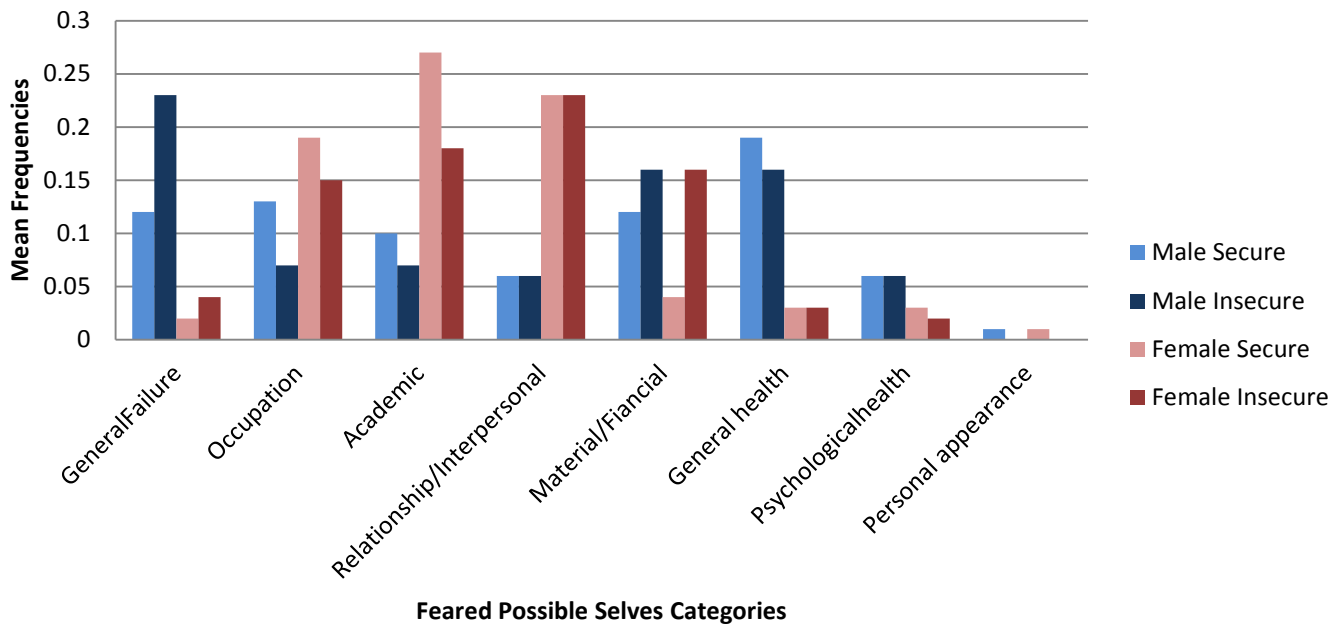


**Figure 3:** Mean frequencies for the mentioned hoped-for possible selves categories

The hoped-for possible selves mentioned most frequently by boy's were occupation followed by material/financial. Whereas the category most frequently mentioned by girls was occupation followed by relationship/interpersonal. Both securely and insecurely attached participants mentioned occupation most frequently followed by relationship/interpersonal.

Figure 4 displays the mean frequencies for the mentioned feared possible selves categories.

The feared selves mentioned most often by boys were general failure followed by general health. The feared possible selves mentioned most frequently by girls were academic/education followed by relationship/interpersonal. The feared selves mentioned most by securely attached participants were academic followed by occupation, whereas the most frequent feared-for selves mentioned by insecurely attached participants were material/financial followed by general failure.



**Figure 4:** Mean frequencies for the mentioned feared possible selves categories

A MANOVA was conducted to evaluate whether a significant gender or attachment by category interaction effect existed in the frequency of mentioned hoped-for possible selves. However, initial assumptions found that the Levene's homogeneity test of variance had been violated, therefore an Arcsin transformation was performed but failed to rectify the problem. As a result, a more conservative alpha level of  $p < .025$  was applied to determine the levels of significance. The Pillai's trace revealed no significant gender by category interactions  $V = .10$ ,  $F(7, 42) = 1.84$ ,  $p = .11$ . However, univariate  $F$  tests did reveal a significant gender difference between the amount of relationship/interpersonal possible selves generated  $F(1, 48) = 5.74$ ,  $p = .02$ , with girls ( $M = .26$ ) generating more than boys ( $M = .13$ ).

The procedure failed to find any significant attachment by category interactions  $V = .14$ ,  $F(7, 42) = .14$ ,  $p = .46$ . Therefore, no further analysis was carried out.

A MANOVA was also conducted to evaluate whether a significant gender or attachment by category interaction effect existed in the frequency of mentioned feared possible selves. However, as with the hoped-for selves the Levene's homogeneity test of variance revealed that the assumption of variance had been violated, therefore an Arcsin transformation was performed, but failed to rectify the problem. Subsequently, as with the hoped-for possible selves a more conservative alpha level of  $p < .025$  was applied to determine the levels of significance.

Once again using Pillai's trace, the analysis revealed a significant gender by category interaction  $V = .36$ ,  $F(8, 41) = 2.87$ ,  $p = .01$ . Further post hoc univariate  $F$  tests found gender differences in the general failure category  $F(1, 48) = 5.49$ ,  $p = .02$ , with boys ( $M = 1.8$ ) generating more than girls ( $M = .03$ ). A gender difference was also found for relationship/interpersonal category  $F(1, 48) = 7.69$ ,  $p < .01$ . Therefore, girls ( $M = .23$ ) mentioned relationships/interpersonal significantly more often than boys

( $M=.06$ ). The Pillai's trace failed to find any significant attachment by category interactions  $V=.12$ ,  $F(8, 41) = .71$ ,  $p=.68$ .

### **Interactions between the individual differences and possible selves**

A full correlation analysis was carried out to explore whether there was any relationship between gender, attachment, or self-esteem with the following variables; mean number of hoped-for possible selves, mean number of feared-for possible selves, mean likelihood ratings of hoped-for and feared-for possible selves, and mean ratings for hoped-for and feared-for possible selves.

Firstly a Spearman's correlation coefficient was chosen to assess the relationship between levels of self-esteem and the possible selves variables. A Spearman's correlation was chosen as the data set benefited from ranking the data due to variance within it. The analysis found a significant relationship between self-esteem levels and the likelihood of hoped-for possible selves,  $r = .47$ ,  $p < .0001$ . Therefore, high self-esteem is related to higher ratings on likelihood of hoped-for possible selves. No other relationships were found between self-esteem and the possible selves data.

In addition a Pearson's correlation was also carried out to see if there was a relationship between self-esteem and attachment or gender. Attachment was found to be significantly correlated with self-esteem  $r = -.71$ ,  $p < .0001$ . No relationship was found between self-esteem and gender  $r = -.09$ ,  $p = .49$ . (Appendix O)

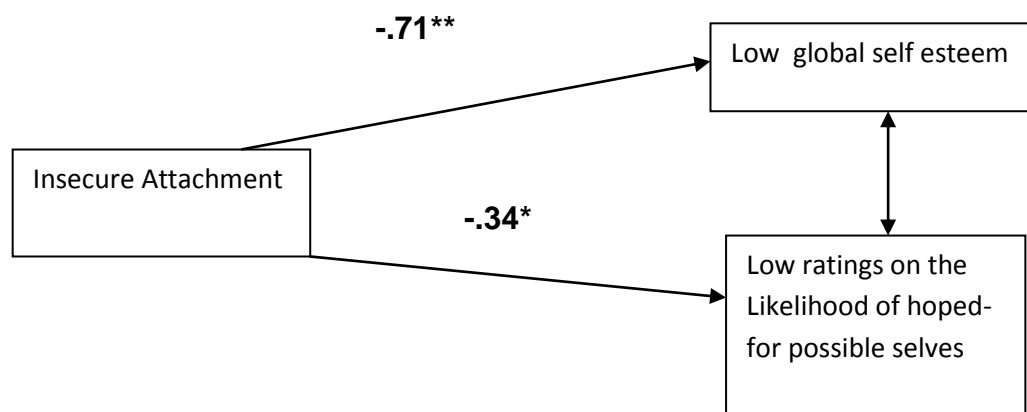
Next point-biserial correlations were computed to explore if there was any relationship between the possible selves variables and gender or attachment. The analysis found a relationship between attachment and the scores participants generated on the likelihood of hoped-for possible selves scale  $r = -.34$ ,  $p = .02$ . No other possible selves variables were found to be correlated with attachment. The analysis also found a positive correlation between gender and the total hoped-for possible selves generated by participants  $r = -.31$ ,  $p = .03$ . No further relationships were found between gender and the possible selves variables.

Further analysis was also carried out to see if there was any relationship between attachment or gender, and the types of possible selves participants were generating in both hoped-for and feared categories. A point-biserial correlation coefficient was conducted again for attachment and gender. The analysis found no relationship between attachment and any of the possible selves categories for either hoped-for or feared selves. However, the analysis did find a number of interactions between gender and the categories.

For hoped-for possible selves categories there was a positive relationship between boys and occupation  $r = -.29$ ,  $p = .03$ , whilst girls were positively correlated with relationships/interpersonal  $r = .32$ ,  $p = .02$ . With feared selves there was a positive correlation between boys and general failure  $r = -.32$ ,  $p = .02$ , and girls and relationships/Interpersonal  $r = -.37$ ,  $p = .01$ . This supports previous analysis that boys generate more general failure categories, whilst female generate more relationship categories.

## Concluding findings

Figure 5 illustrates what significant findings can be drawn from the overall data analysis on attachment.



**Figure 5:** The effect size of the relationship between attachment, self-esteem, and likelihood of hoped-for possible selves variable.  $p < .01^{**}$ ,  $p < .05^{*}$

Figure 5 illustrates that participants categorised as having an insecure attachment scored lower on the global self-esteem questionnaire, as well as rating the likelihood of possible selves variable as less likely to occur than participants categorised as securely attached. Also from analysis the difference between likelihood of hoped-for possible selves appears to lie more heavily in insecure girls than insecure boys.

From the overall analysis on gender it can be concluded that girls generate more hoped-for possible selves than boys. Girls also generated more feared possible selves related to relationships than boys, whilst boys generated more general failure feared selves than girls. This illustrates that some gender differences do arise.

All the findings will now be discussed in more detail in the proceeding Discussion section.

## Discussion

The present study aimed to investigate gender and attachment differences in regards to possible selves and self-esteem during adolescence, thus offering a new account of the present and future self-views of adolescents. As hypothesised, there did appear to be some individual differences in possible selves and self-esteem.

### Self-esteem differences

Firstly it was hypothesised that gender differences would be found in self-esteem scores, yet whilst boys did score higher than girls, differences were not significant. These findings are consistent with previous research, which like the present study, did not consider separate age groups (Knox et al. 2000). However, studies that have examined age groups across adolescence have found differences in self-esteem levels, specifically during early adolescence (Bolognini et al, 1996; Rosenberg & Simmons, 1975; Thorne, & Michalieu, 1996). As a result, the present study may have concealed gender differences in self-esteem by not considering age groups.

In relation to the hypothesis that self-esteem scores would be different between secure and insecure participants, significant results were found. Participants categorised as insecurely attached had considerably lower self-esteem than participants categorised as securely attached. Thus supporting previous research that states insecure attachments lead to lower self-esteem (Cooper & Shaver, 1998). Further investigation showed an interaction between attachment and gender in relation to social self-esteem, indicating that insecure girls had significantly lower social self-esteem than secure girls. This finding is not surprising given that previous research has described insecure individuals as less socially able than secure individuals (Howe, 2005). As a result insecure girls are more likely to suffer from social rejection, and consequently have lower self-esteem in this area.

The present finding that girls may be more vulnerable than boys to lower self-esteem especially in the social area could be related to relationships disturbances. For example, during adolescence there are many interpersonal changes, such as parents becoming less salient in adolescents lives (Bowlby, 1982). These relationship changes are likely to be more prominent in girls since their self-concepts and self-esteem are more interpersonally orientated (Jordan et al. 1991; Thorne et al. 1996). As a result girls may internalise these relationship disturbances as failures, resulting in a negative self-concept and consequently resulting in lower self-esteem. Since most girls only experience short periods of relationship disturbances, the self-esteem differences between girls and boys become less significant as they move into adulthood. In addition, any social disruptions experienced are likely to be more disturbing for insecurely attached girls and may be more prolonged due to more underlying relationship problems, as the present results suggest.

### **Gender differences in possible selves**

In terms of possible selves, results were indicative of gender differences in the total amount of hoped-for possible selves generated, revealing that girls generated more hoped-for selves than boys. This is not unexpected given that during adolescence girls are able to create self-views in more domains than boys (Harter, 1990). However, in contrast to previous studies that found girls generated more feared selves than boys (Knox et al. 2000), the present results indicated no differences between the total number of feared possible selves generated by boys and girls. These findings could be a result of the age range used in this study (13-16 years). As Cross and Markus (1991) explained, younger adolescents often generate ambiguous feared selves, possibly due to being less able to articulate feared selves until they are more cognitively developed. As a result, the age range used in the present study may not have been psychologically mature enough to think of a large amount of feared possible selves. Therefore, if older adolescence were used as was the case in Knox et al. (2000) study, more differences may have been highlighted.

The results addressing the categories of possible selves found that both boys and girls generated a considerable number of possible selves in different domains, thus supporting the notion that for adolescents to establish their identity, it may be necessary to evaluate their potential in many domains (Erikson, 1968, Harter, 1990; Knox et al. 2000). What's more, the most frequent hoped-for possible self-mentioned by adolescents was occupation, with academic being the most feared. These results are what you would expect as adolescence is a time when individuals will not only be worrying about exams, but also thinking about what they want to do in the future.

In regards to gender differences within the categories, analyses found differences in both the hoped-for and feared possible selves categories. Consistent with previous findings the results revealed that boys generated more self-orientated feared possible selves, such as general life failure, whereas girls generated significantly more interpersonal possible selves. These findings support previous reports that girls' self-concepts are generally defined through their relationships, whereas boys focus more on the self, and getting ahead of others (Jordan et al. 1991; Joseph et al. 1992; Knox et al. 2000; Thorne & Michalieu, 1996).

### **Attachment differences in possible selves**

The above findings on gender differences lead to the next aim of the study, investigating attachment in relation to possible selves. The results of the present study as well previous findings (Bowlby, 1982; Cooper et al. 1998; Knox et al. 2001) have indicated that relationships may be an important factor to consider in regards to possible selves and self-esteem. This is especially true for girls given that relationships are important to the development of their self-concept (Jordan et al. 1991). Therefore, attachment was examined in boys and girls.

As expected the analyses demonstrated some significant differences between the possible selves of secure and insecure participants. Most noteworthy was the significant relationship between attachment, self-esteem and likelihood ratings on hoped-for possible selves. The results revealed participants categorised as insecurely attached had lower self-esteem and believed their hoped-for possible selves were less likely to occur than securely attached participants. Further analysis also showed that girls who were insecurely attached were the most likely to generate the feelings of not succeeding in their hoped-for of possible selves. Therefore, this supports the prediction that girls may be more likely to be affected by relationships when thinking about their possible selves than boys.

Analyses also suggested that insecure participants generated less hoped-for selves than secure participants. However this was not found to be significant, although if a larger sample was used the differences may have been more apparent. One explanation for differences in the amount of hoped-for possible selves generated comes from Bowlby (1982). He proposed that secure individuals are likely to have superior cognitive abilities compared to insecure individuals which allow them to reconstruct experiences in a more coherent manner, thus able to generate more possible selves.

In regards to feared possible selves no differences were found between the likelihood ratings. Therefore, whilst the insecure participants believed their hoped-for selves were less likely to occur they did not believe there feared selves were more likely to occur. There were also no differences in the amount of feared selves generated by secure and insecure participants. For that reason attachment does not seem to be impact on feared selves. One explanation for lack of attachment difference between the feared selves may be the age group used. As feared selves are said to develop later than hoped for possible selves the current participants may not have been psychologically mature enough to access more feared selves (Cross et al. 1991; Harter, 1999). Whereas if older participants were used it may have exposed more attachment differences in feared possible selves.

In regards to the possible selves categories no attachment differences were found between the types of possible selves generated. However, this is not surprising given that there are clear gender differences between the possible selves categories. For that reason, it is likely that any differences found in the possible selves categories are related to social context demands, especially as gender-role socialization becomes more prominent during adolescence (Knox et al. 2001). For example, girls are generally thought to take on a more motherly and caring role in society, whilst boys are expected to focus on going to work taking on the more independent role.

### **Implications of the findings for adolescence**

The findings discussed above have a number of implications for adolescence in relation to their present and future self-views. Firstly, motivation and goal directed behaviours are said to be driven by an individual's belief in achieving their hoped-for selves (James, 1890; Knox et al. 1998). Therefore, adolescents with insecure attachments may be more likely to give up on hoped-for possible selves than individuals who are securely attached. This may explain why insecure participants generated less hoped-for possible selves, as possible selves deemed unattainable are said to be disregarded (James, 1890). Hence, this could be why adolescence with insecure attachments are more likely to fail in school and in their futures, as feelings that they will not achieve will probable lead to less motivation and drive to create positive goal directed selves (Oyserman et al. 2006).

The current findings on possible selves and attachment could also offer a way of understanding more serious developmental issues. Take depression for instance, it is surrounded by feelings of low self-esteem, lack of control, and low self-efficacy. All these feelings could be the result of feeling that one is unlikely to achieve what they hope for in life. These feeling can lead to less motivation and hence less likely to achieve, which is a self-fulfilling prophecy leading to a viscous cycle of failure and negative self-views. In support of this claim rates of depression are more prevalent in individuals with an insecure attachment (Cooper et al. 1998), as well as more likely in girls (Hankin & Abramson, 2001).

### **Strengths, limitations and future research**

In spite of these findings it is still unclear how the relationship between attachment, self-esteem, and likelihood of hoped-for possible selves interacts. As with the example above it is likely that insecure attachment causes lower self-esteem which in turn influences how some adolescents perceive achieving their hoped-for selves and consequently may lead to depression. However, could the relationship be bidirectional? For example, insecure attachment leads to feelings of not being able to achieve a hoped for self, which then leads to lower self-esteem and possibly depression. It is likely that they all interact with one another and are closely linked; as a result it could be difficult to pinpoint exactly how they interact. More research should be carried out to explore this relationship further.

From this study one thing appears clear; attachment does seem to influence some elements of adolescents' present and future views, which is not surprising given that extensive research has noted how attachment has an impact on an individual's internal working model and self-concept (Bowlby, 1982). Nevertheless, differences were only in selected areas which may demonstrate the areas attachment seems to effect. However, it is more likely that the present study was not sensitive enough to

areas such as feared selves as a result of the restricted age groups. Hence further research needs to be carried out to investigate whether this is the case. Thus older adolescence would need to be considered as perceptions of relationships and self-views are likely to be more developed and may highlight more differences between gender and attachment groups. In addition, it may also be interesting to study younger children as self-views are likely to be different in them as well (Harter, 1999).

The study was also not without its methodological limitations. For example, the sample size was small, this restricted analyses and interpretation of the results. In future research it is recommended that age groups are considered when analysing self-esteem. However, because of the small sample in the present study it was more beneficial to collapse age groups as the data was able to analyse areas such as attachment more accurately. This is unfortunately a drawback of a small sample group.

Another drawback of the sample size was that insecure attachment was restricted to be investigated as a whole; however future studies using a larger sample size could look at the separate insecure attachment groups to see if there are any possible selves differences. It's predicted that differences are likely to occur given the attachment groups perceive themselves and others around them differently (Bartholomew et al. 1991). For example, research has shown that both secure and dismissive individuals have a positive self-view, whilst preoccupied and anxious individuals have negative self-views (Bartholomew et al, 1991; Cooper et al. 1998), which is likely to impact on how they perceive possible selves.

Another matter that needs to be addressed is the attachment patterns discussed in this report because they are only indicative of secure and insecure groups. Therefore, the results need to be considered in terms of possessing traits within each attachment group, it is not as an actual diagnosis. This is due to the nature of the Relationship Questionnaire (RQ) (Bartholomew et al. 1991). The RQ is only a short attachment questionnaire administered to the participant. For more reliable results it would be advised to collect data from different sources i.e. parents and teachers, as well as administering a more detailed method of measuring attachment, such as the 'Adult Attachment Interview' revised for adolescents (Main & Soloman, 1990). Unfortunately the present study was unable to do this due to time constraints, restricted accessibility to multiple sources, as well as lack of expertise on carrying out a more detailed attachment questionnaire. It would also be necessary to explore other significant relationships such as peers, as these types of relationships become more salient during adolescence and have been found to impact on an individual's self-esteem (Greenberg et al. 1983; Shaffer, 1999).

In terms of the sample, it consisted predominantly of English participants, and so the results may only be generalizable to this group. It would therefore be beneficial to explore different ethnic groups, particularly as research suggests adolescents from different ethnic or racial groups evaluate their self-concepts in different ways (Erkut, Marx, Fields, & Sling, 1999). For example, research suggests that some possible selves are related to cultural values, for example individualism and collectivism (Oyserman et al, 2006), which will also affect how they perceive relationships. In addition different racial groups may experience different types of discrimination which will almost certainly impact on their self-views. For that reason, different ethnic



groups need to be explored further, as to allow for more culturally sensitive interventions both within schools and once adolescents left school. However, it was felt that exploring ethnic differences went beyond the aims of the present study.

In spite of these weaknesses there were also several strengths to the study. For example, the possible selves questionnaire was free-response which allowed the participants to freely create as many possible selves as they wanted in as many domains they could generate. This allowed great insight into the self-views of adolescents, something that a closed questionnaire would have restricted. The study also measured self-esteem which gave a quantitative measure of self-views, thus giving a multi-dimensional approach to exploring adolescents self-views. As an added precaution the questionnaires were counterbalanced as to make sure that the participants were not influenced by the types of possible selves stated first.

On the whole this study has explored an area of possible selves that until now had not been investigated, therefore offering new ways of understanding differences in adolescence possible selves. The present findings indicate that relationships and attachment in particular do need to be considered when exploring possible selves as they appear to impact on self-esteem, as well as how adolescents perceive their hoped-for selves. Thus providing new scope for understanding individual differences in adolescence self-views. However, the present research has only touched on attachment and so there is a lot more that needs to be explored within this domain. In addition this study also supports previous research on gender differences and in particular highlights the importance of relationships for girls. Hopefully with further investigation these findings along with others could offer new ways of understanding both possible selves in adolescents as well as how attachment influences adolescents self-views.

What's more, with further research and increased knowledge in this area more support can be put in place within schools to help encourage adolescents to think about their future, as well as making adolescents aware of the impact their self-views can actually have on their futures. More awareness of possible selves could also help assist teachers in being able to recognise those who are more likely to be vulnerable to negative possible selves and put in place interventions. For example, one intervention could be encouraging adolescents think about their future goals and then construct a plan to achieve it. Self-esteem building exercises would also be beneficial for some adolescents, which could involve talking about their strengths and weaknesses in a positive manner.

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